63-4-2

407785

BOEING

[redacted]

407785

SEATTLE, WASHINGTON

THE BOEING COMPANY

CODE IDENT NO. 81205

NUMBER D2-9262 VOL. XIV

TITLE SITE ACCEPTANCE TEST PROCEDURES - WARREN AFB

MODEL NO. WS-133A CONTRACT NO. AF04(694)-107

ISSUE NO. 37 ISSUED TO ASTIA

SPECIAL LIMITATIONS ON ASTIA DISTRIBUTION

ASTIA may distribute this report to requesting agencies subject to their security agreement, approved fields of interest, and the following.

☒ UNLIMITED—To all agencies of the Department of Defense and their contractors

☐ LIMITED—To U. S. Military organizations only

This report may be distributed to nonmilitary agencies not approved above subject to Boeing approval of each request.

NOTE the LIMITED category may be checked only because of actual or potential patent, proprietary, ethical, or similar implications.

PREPARED BY	SITE ACCEPTANCE PROCEDURES GROUP	
SUPERVISED BY	[illegible]	6-6-63
APPROVED BY	[illegible]	6-6-63
APPROVED BY	[illegible]	6-6-63
CLASS & DISTR APPROVED BY	[illegible]	6-6-63 (DATE)

REV SYM _____

VOL. NO. XIV	OF D2-9262
SECT. -	PAGE

U3 4287 9038 ORIG. 8/62

2-8142-2

ACTIVE PAGE RECORD

SECTION	ORIG REL PAGE NO.	REV SYM	ADDED PAGES						SECTION	ORIG REL PAGE NO.	REV SYM	ADDED PAGES					
			PAGE NO.	REV SYM	PAGE NO.	REV SYM	PAGE NO.	REV SYM				PAGE NO.	REV SYM	PAGE NO.	REV SYM	PAGE NO.	REV SYM
	1									27							
	2									28							
										29							
	3									30							
										31							
	4									32							
	5									33							
	6									34							
	7									35							
	8									36							
	9									37							
	10									38							
	11									39							
	12									40							
	13									41							
	14									42							
	15									43							
	16									44							
	17									45							
	18									46							
	19									47							
	20									48							
	21									49							
	22																
	23																
	24																
	25																
	26																

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
	Original Release. (PRR 28900)	6-7-63	F. Yoshimura

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

THE PURPOSE OF THIS DOCUMENT IS TO SPECIFY THE ACCEPTANCE TESTS REQUIRED FOR THE CHECKOUT OF EQUIPMENT ASSEMBLED INTO A MINUTEMAN MISSILE SYSTEM BY THE BOEING COMPANY AT WARREN AFB PREPARATORY TO THE EVENTAUL ACCEPTANCE OF THE FLIGHTS, SQUADRON & THE ENTIRE WING.

PROCEDURE DOCUMENTS REQUIRED FOR THE CERTIFICATION OF ASSEMBLY AND CHECKOUT (ACO) TEST EQUIPMENT AS WELL AS THE DOCUMENTS REQUIRED FOR CHECKOUT OF OGE AND MGE EQUIPMENT ARE CALLED OUT HEREIN.

1.2 ORGANIZATION OF DOCUMENT

THE INFORMATION CONTAINED IN THIS DOCUMENT IS CATEGORIZED AS TO TYPE AND PRESENTED UNDER MAJOR PARAGRAPHS AS FOLLOWS:

PARAGRAPH 1.0 IS THE INTRODUCTION AND THE SUB-PARAGRAPHS UNDER IT CONTAIN THE DESCRIPTION OF THE PURPOSE AND SCOPE OF THE DOCUMENT, DEFINITION OF TERMS PARTICULARLY APPLICABLE TO THE ASSEMBLY AND CHECKOUT TASK, THE GENERAL REQUIREMENTS CONTAINING GROUND RULES GOVERNING DURING THE CHECKOUT PROCESS, AND THE CONDITIONS THAT ARE APPLICABLE DURING TESTING.

THE REMAINING MAJOR PARAGRAPHS CONTAIN THE VARIOUS TABLES IN WHICH THE REQUIRED TESTING AND DOCUMENTATION IS IDENTIFIED. THE TABLES CONTAIN EACH TEST TO BE PERFORMED AND IDENTIFY THE PROCEDURES TO BE USED.

PARAGRAPH 2.0 CONTAINS TABLES 1 AND 2 WHICH COVERS ALL THE TESTING AND DOCUMENTATION REQUIRED FOR ACTIVATION OF THE CONTRACTOR SUPPORT AREA (CSA) AND THE PREASSEMBLY TESTING OF OGE AND MGE.

TABLE 1 IDENTIFIES THE TESTING AND PROCEDURE DOCUMENTS REQUIRED TO ACTIVATE THE CSA. ALL OF THE TESTING OF ACO EQUIPMENT IS COVERED IN THIS TABLE. SOME OF THE ACO EQUIPMENT IS ASSEMBLED AND UTILIZED IN THE CSA AND IS IDENTIFIED AS SUCH. OTHER ACO EQUIPMENT IS USED AT THE LF, LCF & SMSB BUT THE TESTING AND CERTIFICATION OF IT IS ACCOMPLISHED AT THE CSA.

TABLE 2 IDENTIFIES THE PREASSEMBLY TESTING AND PROCEDURES REQUIRED FOR THE OGE AND MGE BEING PROCESSED THROUGH THE CSA AND/OR THE SMSB.

TABLE 3 IDENTIFIES THE TESTING AND PROCEDURES REQUIRED FOR THE CHECK-OUT OF EQUIPMENT ASSEMBLED WITHIN THE LCF. THIS TESTING INCLUDES THE POSTASSEMBLY CHECKOUT OF END-ITEMS AND THE INTEGRATION TESTING OF SUBSYSTEMS AND SYSTEMS BUT DOES NOT INCLUDE ANY INTEGRATION TESTING INVOLVING ITEMS NOT ASSEMBLED WITHIN THE LCF.

1.2 (CONT.)

TABLE 4 IDENTIFIES THE TESTING AND PROCEDURES REQUIRED FOR THE CHECK-OUT OF EQUIPMENT ASSEMBLED WITHIN THE LF. THIS TESTING INCLUDES THE POSTASSEMBLY CHECKOUT OF END-ITEMS AND THE INTEGRATION TESTING OF SUBSYSTEMS AND SYSTEMS BUT DOES NOT INCLUDE ANY INTEGRAT ON TESTING INVOLVING ITEMS NOT ASSEMBLED WITHIN THE L.F.

TABLE 5 IDENTIFIES THE TESTING AND PROCEDURES REQUIRED FOR THE CHECKOUT OF EQUIPMENT ASSEMBLED W THIN THE SMSB.

TABLE 6 IDENTIFIES THE TESTING AND PROCEDURES REQUIRED FOR THE INTEGRATION OF LF AND LCF EQUIPMENT WITHIN A FLIGHT AND FOR THE INTEGRATION OF EQUIPMENT BETWEEN TWO OR MORE FLIGHTS.

1.3 DEFINITIONS

ASSEMBLE

THE ACT OF RECEIVING EQUIPMENT AND MATERIAL AT THE WORK SITE AND PERFORMING SUCH FURTHER WORK AS IS NECESSARY TO EMPLACE AND IN ER-CONNECT THE EQUIPMENT IN ACCORDANCE WITH ASSEMBLY DRAWINGS AND DOCUMENTATION. THE TERM "ASSEMBLE" IS APPROPRIATE EVEN WHEN THE UNIT IS COMPLETELY PORTABLE AND DOES NOT REQUIRE PERMANENT CONNEC-TION TO FACILITIES OR OTHER EQUIPMENT.

ASSEMBLY AND CHECKOUT EQUIPMENT (ACO)

THE CATEGORY OF TEST EQUIPMENT CONSISTING OF SPECIAL FACILITIES CONTRACT EQUIPMENT, (SFC/OH) AND BASE ACTIVATION TEST EQUIPMENT (BATE) USED IN ASSEMBLY AND CHECKOUT AND TRANSFERABLE FROM SITE TO SITE DURING SYSTEM ASSEMBLY.

BASE ACTIVATION TEST EQUIPMENT (BATE)

EQUIPMENT USED DURING ASSEMBLY AND CHECKOUT AND REQUIRING SPECIAL DESIGN THAT IS PECULIAR TO THE MINUTEMAN ASSEMBLY AND CHECKOUT TASK.

MAINTENANCE GROUP EQUIPMENT (MGE)

THE EQUIPMENT REQUIRED TO MAINTAIN THE MINUTEMAN MISSILE AND THE OGE IN A CONDITION SUCH THAT THE WEAPON SYSTEM IS CAPABLE OF PER-FORMING ITS MISSION. THE TERM "MAINTAIN" INCLUDES SUCH FUNCTIONS AS "TEST", "REPAIR" AND "TRANSPORT."

OPERATIONAL GROUND EQUIPMENT (OGE)

EQUIPMENT REQUIRED TO SUPPORT THE MINUTEMAN MISSILE IN THE DIRECT PERFORMANCE OF ITS MISSION. THIS INCLUDES THE EQUIPMENT REQUIRED TO READY THE MISSILE DURING THE LAUNCH SEQUENCE AND TO INITIATE LAUNCH.

1.3 (CONT.)

END-ITEM

SMALLEST ASSEMBLY OF EQUIPMENT IDENTIFIED BY A FIGURE A NUMBER OR ACO NUMBER RECEIVED OR ASSEMBLED ON THE BASE SITE. THESE ITEMS HAVE PREVIOUSLY UNDERGONE (1) AN ACCEPTANCE TEST PRIOR TO SHIPMENT FROM A VENDOR'S PLANT, AND (2) RECEIVING INSPECTION AT THE BASE SITE.

SUB-SYSTEM

A COMBINATION OF TWO OR MORE END-ITEMS WHICH ARE COMBINED AT THE BASE SITE AND WHICH, AFTER COMBINATION, PERFORM AN INDIVIDUAL FUNCTION.

SYSTEM

A COMBINATION OF ALL SUBSYSTEMS THAT ARE NECESSARY TO SUPPORT A MAJOR PART OF THE MINUTEMAN WEAPON SYSTEM AT THE BASE SITE.

PREASSEMBLY TESTING

PREASSEMBLY TESTING IS A CONFIDENCE CHECK PERFORMED ON CRITICAL ITEMS OF EQUIPMENT TO ENSURE THAT ONLY PROVEN EQUIPMENT IS ASSEMBLED. THIS REDUCES POSTASSEMBLY MALFUNCTION, AND SUBSEQUENT FAULT ISOLATION TO EQUIPMENT ASSEMBLY RATHER THAN INTERNAL BREAKDOWN. GENERALLY, THIS TESTING IS RESTRICTED TO ITEMS OF ELECTRONIC EQUIPMENT AND SENSITIVE UNITS OF MECHANICAL EQUIPMENT.

POSTASSEMBLY TESTING

POSTASSEMBLY TESTING FOLLOWING THE ASSEMBLY OF EQUIPMENT IS PERFORMED WITH THE SAME TYPE OF PORTABLE TEST SETS NORMALLY USED IN ORGANIZATIONAL MAINTENANCE. IN INSTANCES WHERE A UNIQUE FUNCTION MUST BE PERFORMED, SPECIAL TEST EQUIPMENT (BATE) IS USED.

INTEGRATION TESTING

INTEGRATION TESTING IS THE POSTASSEMBLY CHECKOUT OF TWO OR MORE END-ITEMS ASSEMBLED INTO A SUB-SYSTEM OR SYSTEM.

FLIGHT INTEGRATION

FLIGHT INTEGRATION IS THE PROCESS BY WHICH THE TEN LF'S COMMON TO AN LCF ARE PROGRESSIVELY CONNECTED INTO THE SYSTEM AFTER ASSEMBLY AND CHECHED OUT AS INDIVIDUAL FACILITIES.

FLIGHT-TO-FLIGHT INTEGRATION

THIS TESTING COMMENCES WITH DELIVERY OF THE SECOND FLIGHT AND IS A JOINT AIR FORCE-BOEING OPERATING. THIS TESTING CONSISTS OF LINE EQUALIZATION VERIFICATION ON THE INTER-FLIGHT LINES AT THE AFFECTED LAUNCH FACILITIES, FOLLOWED BY LAUNCH NET VERIFICATION TEST CONDUCTED FROM BOTH LAUNCH CONTROL FACILITIES.

1.3 (CONT.)

TEST [illegible]

A DESIGN CONDITION THAT SHALL BE ACHIEVED IN AN END-ITEM, SUB-SYSTEM OR SYSTEM, AS ASSEMBLED, TO ENSURE COMPLIANCE WITH EQUIPMENT AND PERFORMANCE SPECIFICATIONS.

1.4 GENERAL REQUIREMENTS

THE FOLLOWING GENERAL REQUIREMENTS ARE APPLICABLE TO ALL PARAGRAPHS OF THIS VOLUME.

1.4.1 CALIBRATION-CERTIFICATION

BEFORE PERFORMING ANY TEST SPECIFIED HEREIN, ACO EQUIPMENT MUST BEAR A VALID QUALITY CONTROL CERTIFICATION LABEL IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN D2-12075, "CALIBRATION, CERTIFICATION, AND TEST DOCUMENTATION INDEX".

1.4.2 UNSCHEDULED EVENTS

ANY UNSCHEDULED EVENT THAT OCCURS DURING TESTING SHALL BE REFERRED TO THE BOEING LIAISON ENGINEER FOR NECESSARY ACTION. INSTRUCTIONS THAT MAY BE CONTAINED IN INDIVIDUAL PROCEDURES CONCERNING MALFUNCTIONS OR OTHER UNSCHEDULED EVENTS SHALL NOT BE PERFORMED UNLESS SO DIRECTED BY THE LIAISON ENGINEER. THE ACTION TAKEN SHALL BE COORDINATED WITH THE BOEING QUALITY CONTROL DEPARTMENT.

CAUTION

ALL ELECTRONIC MALFUNCTIONS IN THE LF AND LCF SHALL BE ISOLATED BY THE USE OF STANDARD MINUTEMAN TEST EQUIPMENT APPLIED TO PRESCRIBED TEST POINTS. THE USE OF TEST EQUIPMENT TO TAKE VOLTAGE READINGS AT NON-STANDARD POINTS IN ELECTRONIC CHASSIS FOR MALFUNCTION ISOLATION, REFERRED TO AS PROBING, IS PROHIBITED.

1.4.3 TEST ORDER

THIS DOCUMENT DOES NOT PROVIDE THE ORDER OF TEST SEQUENCING. TEST SEQUENCES MUST BE DERIVED FROM THE PREREQUISITES GIVEN IN THE INDIVIDUAL TEST PROCEDURES.

1.4.4 SAFETY PRECAUTIONS

COMPLIANCE WITH THE SAFETY PRECAUTIONS PROVIDED IN USAF BSD EXHIBIT 62-16, "MINUTEMAN WEAPON SYSTEM SAFETY STANDARD", AND THE WARREN AFB SUPPLEMENT TO EXHIBIT 62-16 IS MANDATORY.

1.4.4 (CONT.)

PRIOR TO THE START OF AND DURING THE CONDUCT OF ANY SITE ACCEPTANCE TESTS, COMPLIANCE WITH ALL APPLICABLE SAFETY RESTRAINTS SET FORTH IN D2-9262, VOL. XIV AND THE DOCUMENTS REFERENCED IN TABLES 1 THROUGH 6 IS MANDATORY. THESE SAFETY RESTRAINTS ARE ALSO SET FORTH IN A CONVENIENT CHECK LIST FORM IN D2-14863-5 "SAFETY CHECK LIST FOR FLIGHT AND SQUADRON ACCEPTANCE TESTS". THESE CHECK LISTS PRESENTED IN D2-14863-5 SHALL BE USED ONLY AFTER IT HAS BEEN DETERMINED THAT THEY DO NOT CONFLICT WITH THE SAFETY RESTRAINTS SPECIFIED IN THIS DOCUMENT. IN CASE OF CONFLICT, THE REQUIREMENTS OF THIS DOCUMENT SHALL GOVERN.

1.4.5 FACILITY ACCEPTANCE

ALL REAL PROPERTY AND REAL PROPERTY INSTALLED EQUIPMENT (RPIE) SHALL HAVE BEEN ACCEPTED IN ACCORDANCE WITH THE VALIDATION PROCEDURES PER CONTRACT DA-04-548-ENG-98, SPECIFICATION SERIAL NO. ENG-04-548-63-5, VOL. IV, "SPECIFICATIONS FOR MINUTEMAN FACILITIES AT WARREN AIR FORCE BASE".

1.4.6 COOLING AIRFLOW ADJUSTMENT

NO POWER SHALL BE APPLIED TO ANY EQUIPMENT REQUIRING COOLING AIR PRIOR TO THE COMPLETION OF THE REQUIRED ADJUSTMENTS TO THE COOLING AIR PROVIDED FOR THE EQUIPMENT.

1.4.7 VOLUME IDENTIFICATION

TO ACHIEVE CONSISTENT DOCUMENT NUMBERING WITHIN THIS DOCUMENT, VOLUMES OF TEST PROCEDURE DOCUMENTS ARE DENOTED BY DASH NUMBERS, I.E., D2-xxxx-6.

1.4.8 ASSEMBLY REQUIREMENTS

PRIOR TO POSTASSEMBLY TESTING, THE EQUIPMENT TO BE CHECKED OUT SHALL HAVE BEEN ASSEMBLED AND INSPECTED IN ACCORDANCE WITH THE FOLLOWING APPLICABLE ASSEMBLY DRAWINGS:

LAUNCH CONTROL FACILITY ASSEMBLY - WARREN AFB	24-3405
LAUNCH FACILITY ASSEMBLY - WARREN AFB	24-3404
MINUTEMAN STRATEGIC MISSILE SUPPORT BASE ASSEMBLY - WARREN AFB	24-3404

1.5 SPECIAL REQUIREMENTS

1.5.1 ENVIRONMENTAL CONTROL SYSTEM OPERATION

THE ENVIRONMENTAL CONTROL SYSTEMS IN THE LAUNCHER EQUIPMENT ROOM OF THE LAUNCH FACILITY AND IN THE LAUNCH CONTROL CENTER SHALL NOT BE OPERATED UNTIL THE AMBIENT AIR TEMPERATURE IS AS SPECIFIED IN PARAGRAPH 1.5.3. THE AMBIENT AIR REQUIREMENTS SHALL BE INITIALLY ESTABLISHED IN ACCORDANCE WITH THE LF PREHEAT PROCEDURES OF DOCUMENT D2-10027.

1.5.2 PREHEAT OPERATION

THE PREHEAT OPERATION SHALL BE INITIATED, MAINTAINED, AND TERMINATED IN THE LAUNCH CONTROL CENTER AND LAUNCH FACILITY IN ACCORDANCE WITH D2-10027. THE PREHEAT EQUIPMENT IN THE LAUNCH FACILITY SHALL NOT BE REMOVED UNTIL THE COMPLETION OF THE SINGLE-THREAD COMMAND & MONITOR TEST REQUIRED BY D2-14556-5.

1.5.3 LAUNCH CONTROL CENTER, LAUNCH EQUIPMENT AND SMSB ENVIRONMENT

AT THE BEGINNING AND END OF EACH TEST PERIOD, OR AT THE BEGINNING OF THE TEST DAY AND EACH 12 HOURS THEREAFTER DURING WHICH ELECTRONIC EQUIPMENT IS OPERATING (ELECTRICAL POWER APPLIED), THE FOLLOWING AMBIENT AIR CONDITIONS SHALL BE MEASURED AND RECORDED, AND SHALL BE AS SPECIFIED.

A) TEMPERATURE - THE TEMPERATURE IN THE LAUNCH CONTROL CENTER SHALL BE WITHIN THE LIMITS OF 69°F AND 78°F.

THE TEMPERATURE IN THE LAUNCHER EQUIPMENT ROOM SHALL BE WITHIN THE LIMITS OF 60°F AND 80°F.

THE TEMPERATURE IN THE SMSB DURING PERIODS OF EQUIPMENT OPERATION SHALL BE BETWEEN 70°F AND 74°F.

B) RELATIVE HUMIDITY - THE RELATIVE HUMIDITY IN THE LAUNCH CONTROL CENTER SHALL NOT EXCEED THE UPPER PERCENT LIMIT SET BY A STRAIGHT LINE ON A PSYCHROMETRIC CHART CONNECTING 69°F AT 55% RELATIVE HUMIDITY AND 78°F AT 45% RELATIVE HUMIDITY.

THE RELATIVE HUMIDITY IN THE LAUNCHER EQUIPMENT ROOM SHALL NOT EXCEED THE UPPER PERCENT LIMIT SET BY A STRAIGHT LINE ON A PSYCHROMETRIC CHART CONNECTOMG 60°F AT 60% RELATIVE HUMIDITY AND 80°F AT 45% RELATIVE HUMIDITY.

THE RELATIVE HUMIDITY OF THE AIR IN THE SMSB SHALL NOT EXCEED 60% AT 72 DEGREES DRY BULB.

NOTE

THE FOLLOWING TEST EQUIPMENT IS NECESSARY TO SATISFY THESE REQUIREMENTS:

A. THERMOMETER, SELF-INDICATING, LIQUID IN GLASS, ACO-3023.

B. SLING PSYCHROMETER, ACO-316.

1.5.4 EQUIPMENT COOLING AIR REQUIREMENTS

At the beginning of each test period, and each 12 hours thereafter during which electronic equipment requiring ducted cooling air is operating (Electrical power applied), the temperature at the ducted equipment cooling air shall be measured and recorded. The measurement procedures and responses shall be as specified in the applicable portion of D2-14553-5.

1.5.5 CONTROL OF ACCESS TO LAUNCHER

During the Assembly and Checkout Period, the Launcher Closure and the Personnel Access Hatch shall be kept in a closed position unless otherwise authorized by the Senior Field Supervisor at the Launch Facility. In the event that the personnel hatch must be opened, the ACO-4267 "Vehicle to Access Shaft Protective Cover" shall be used whenever possible.

1.5.6 SCN COMMAND LINE CONNECTIONS STATUS

Acheck shall be made to ensure that no SCN Command Lines are connected at the Interconnecting Box before any of the following integration tests are performed:

Launch Facility Start-Up Test per D2-14550-5

Launch Facility End-to-End Test per D2-14551-5

Test and Adjustment of Security System per D2-11276-5

LF - Missile Integration Test per D2-14560-5

Grounding and Ordnance Circuit Test per D2-14552-5

1.5.7 ELECTRICAL POWER REQUIREMENTS

Before electrical power connections are made to a piece of equipment, assurance shall be received that the power shall be of the proper type and quality and that the equipment has been grounded in accordance with requirements of their assembly drawings.

1.5.8 LAUNCH CONTROL SYSTEM SAFETY REQUIREMENTS

Prior to the beginning of an integration test and during the performance of any integration test, the following configuration shall be maintained except where the test procedure specifically authorizes otherwise:

A) LCF - All ten (10) launch enable switches in the Communications Control Console shall be in the "SAFE" position.

B) LF - (1) In the main distribution box, the safety-control switch shall be mechanically positioned and locked in the "SAFE" position.

1.5.8 (CONT.)

B) CONT.

(2) ACO-172 MUST BE INSTALLED IN THE P/G CAVITY WHEN THE MISSILE IS IN PLACE AND CONNECTED TO THE G&C UMBILICAL AND SKIRT UMBILICAL CABLES.

1.5.9 MISSILE SAFETY REQUIREMENTS

PRIOR TO THE BEGINNING OF ANY INTEGRATION TEST AND DURING THE PERFORMANCE OF ANY INTEGRATION TEST, THE FOLLOWING CONFIGURATION OF THE MISSILE ORDNANCE SYSTEMS SHALL BE MAINTAINED UPON ANY MISSILE WHICH MAY HAVE BEEN EMPLACED IN AN LF IN A FLIGHT EXCEPT WHERE THE TEST PROCEDURE SPECIFICALLY AUTHORIZES OTHERWISE:

A) SAFING PINS SHALL BE INSTALLED IN THE FOLLOWING ORDNANCE DEVICES:

(1) FIRST-STAGE IGNITOR AT THE REAR END OF THE SECOND-STAGE ENGINE.

(2) SECOND-STAGE IGNITOR AT FORWARD END OF THE FIRST-STAGE ENGINE.

(3) THIRD-STAGE IGNITOR AT AFT END OF THIRD-STAGE ENGINE.

(4) FIRST AND SECOND STAGE SEPARATIONS DEVICE AT INTERSTAGE A.

(5) SECOND AND THIRD STAGE SEPARATIONS DEVICE AT INTERSTAGE B.

(6) THRUST TERMINATOR AT THE FORWARD END OF THE THIRD-STAGE ENGINE.

B) THE G&C UMBILICAL CABLE (W548) SHALL NOT BE CONNECTED TO THE MISSILE UNTIL THE SINGLE THREAD COMMAND AND MONITOR TEST HAS BEEN COMPLETED.

C) THE SKIRT UMBILICAL (W510) SHALL NOT BE CONNECTED IN THE MISSILE.

1.5.10 LAUNCH FACILITY ORDNANCE SYSTEM SAFETY REQUIREMENTS

PRIOR TO THE BEGINNING OF AND DURING THE PERFORMANCE OF ANY INTEGRATION TEST, THE FOLLOWING CONFIGURATION OF THE LF ORDNANCE SYSTEM SHALL BE MAINTAINED:

A) W550 FROM THE GUIDANCE AND CONTROL UMBILICAL CABLE RETRACTOR SHALL BE DISCONNECTED.

B) W551 FROM THE LAUNCHER CLOSURE ACTUATING AND LOCKING MECHANISM SHALL BE DISCONNECTED.

C) W716 FROM THE G&C UMBILICAL PLUG SHALL BE DISCONNECTED.

1.5.11 COMMAND LINE CONNECTIONS

PRIOR TO THE BEGINNING AND DURING THE PERFORMANCE OF ANY INTEGRATION TEST, THE COMMAND LINE LINKS IN THE LCF AND LF INTERCONNECTING BOXES IN THE AFFECTED FACILITIES SHALL HAVE BEEN REMOVED AND STORED AT A LOCATION CONVENIENT TO THE BOX. THESE CONNECTING LINKS MAY BE REINSTALLED ONLY WITH THE PERMISSION OF THE SENIOR FIELD SUPERVISOR AT THE LCF EVEN THOUGH INSTALLATION IS REQUIRED AS PART OF A TEST PROCEDURE.

1.5.12 LCF AND LF SHUTDOWN AND START-UP PROCEDURES

1.5.12.1 ASSEMBLY THE ACO-545.5 LCF SHUTDOWN/STARTUP PROCEDURE PLACARD TO THE WALL OF THE LAUNCH CONTROL CENTER BENEATH THE EMERGENCY ESCAPE HATCH. THE PLACARD SHALL BE POSITIONED SO THAT IT WILL BE VISIBLE TO THE OPERATOR SEATED AT THE LAUNCH CONTROL CONSOLE. THE ATTACHMENT HARDWARE IS PROVIDED AS PART OF ACO-545.5. EFFECTIVITY OF THE PLACARD IS SPECIFIED IN 25-39271.

1.5.12.2 ASSEMBLE THE ACO-544.5 LF SHUTDOWN/STARTUP PROCEDURE PLACARD TO THE EQUIPMENT ROOM SIDE OF THE LAUNCH TUBE LINER IN THE LOWER LAUNCHER EQUIPMENT ROOM, OPPOSITE THE FIG. A 1283 MOTOR GENERATOR SET. THE ATTACHMENT HARDWARE IS PROVIDED AS PART OF ACO-544.5. EFFECTIVITY OF THE PLACARD IS SPECIFIED IN 25-39270.

1.5.12.3 DURING ASSEMBLY AND CHECKOUT AND PRIOR TO THE DELIVERY OF A FLIGHT, ALL SHUTDOWNS AND STARTUPS OF THE LAUNCH CONTROL FACILITY SHALL BE IN ACCORDANCE WITH THE PROCEDURES PROVIDED ON THE ACO-545.5 PLACARD AND ALL SHUTDOWNS AND STARTUPS OF THE LAUNCH FACILITIES SHALL BE IN ACCORDANCE WITH THE PROCEDURES PROVIDED ON THE ACO-544.5 PLACARD UNLESS OTHERWISE SPECIFIED IN THE TEST PROCEDURES REFERENCED IN THIS DOCUMENT.

1.5.12.4 FOLLOWING COMPLETION OF THE LAST CHECKOUT TEST AND PRIOR TO DELIVERY OF THE FLIGHT TO THE AIR FORCE, THE ACO-544.5 AND ACO-545.5 PLACARDS SHALL BE REMOVED FROM EACH LAUNCH FACILITY AND THE LAUNCH CONTROL FACILITY RESPECTIVELY.

1.5.13 INTERIM SECURITY REQUIREMENT

AS EARLY AS PRACTICALBE, INTERIM SECURITY EQUIPMENT SHALL BE ASSEMBLED AND CHECKED OUT IN EACH LAUNCH FACILITY.

THE EQUIPMENT REQUIRED, THE DETAILED DESCRIPTION OF INSTALLATION, CHECKOUT AND THE REMOVAL OF THE EQUIPMENT SHALL BE IN ACCORDANCE WITH D2-15006-3, "INSTALLATION, CHECKOUT, AND USE OF LF INTERIM SECURITY SYSTEM."

THE NORMAL OPERATIONAL FUNCTIONING OF SWITCH CIRCUITRY OF EACH OUTER ZONE SWITCH, THE ACCESS HATCH CLOSURE (PRIMARY DOOR) SWITCH AND THE VAULT DOOR COMBINATION LOCK SWITCH WILL HAVE BEEN VERIFIED DURING CHECKOUT OF THE INTERIM SECURITY SYSTEM PER D2-15006-3. THESE FUNCTIONS NEED NOT BE REVERIFIED.

1.6 Equipment Not Requiring Functional Testing

Tables 1 through 6 of this document include only those items requiring functional testing. The Fig. A and ACO items listed below do not require functional testing; however, some of these items do require calibration, servicing or proof-load testing. For such items, refer to D2-12075, "Calibration, Certification and Test Documentation Index".

1.6.1 Figure A Items Not Requiring Functional Testing

FIG. A ITEM	OGE
602.2	Collimator Set
604.4	Coupler, Guidance Control
1246	Cable Assembly Set, Launch Control
1248	Cable Assembly Set, Launcher
1252.2	Adapter, Ring, Missile Support
1268	Decoder, Command Signals
1334	Seat, Operator's
1335	Seat, Operator's
1370	Lighting Equipment, Survival
1375	Damper Set, Flue, Electronic Cooling
1385	Distribution Box, Power and Communication
1409	Arrester Set, Electrical Surge

FIG. A ITEM	MGE
553	Transformer, Ratio, Gertsch RT Model 529
554	Shifter, Phase Gertsch
555	Precision DC Voltage Standard
559	400-Cycle Oscillator
560	AC - DC Converter
565	Truck, Hand, Autonavigator
575	Tripod, Theodolite, Wild IVa
580	Indicator, Pressure
583	Kit, Module Connector Alignment
585	Set, Traverse Target
590	Voltmeter, Precision, D. C.
593	Resistance Box, Decade
617	Support Ring, Autonavigator H&A
631	Mirror Azimuth Alignment

1.6.1 (CONT.)

FIG. A ITEM	MGE
637	SHIPPING AND STORAGE CONTAINER, MISSILE GUIDANCE SET
642	OPTICAL ALIGNMENT SET
648	THEODOLITE
657	FIXTURE, TRANSFER AUTONAVIGATOR
660	MOUNT, THEODOLITE
675	MIRROR, AZIMUTH ALIGNMENT
684	COVER, PROTECTIVE
687	COVER, ASSEMBLY, DUST
719	OPTICAL ALIGNMENT GROUP
3009	PULLER, PRINTED CIRCUIT
3022	TRUCK, DOLLY
3037	HOIST, CHAIN
3046	BATTERY FILLER, GRAVITY
3048	SLING, BEAM TYPE
3050	SLING, BEAM TYPE
3052	SLING, MULTIPLE LEG
3053	CLAMP, RESTRAINING, HYDRAULIC ACTUATOR
3066	TRUCK, HAND, LIFT
3067	VOLTMETER
3096	SHIPPING AND STORAGE CONTAINER
3119	ADAPTER ASSEMBLY, SPANNER WRENCH
3140	INDICATOR, DIGITAL DISPLAY
4001	MULTIMETER
4004	OSCILLOSCOPE
4006	OSCILLATOR, AUDIO FREQUENCY
4025	CONTAINER, SAFE-ARM PINS
4028	ADAPTER, HOISTING, G&C SECTION
4038	BARRIER SET, LAUNCHER-OPENING, SAFETY
4041	TESTER, GAS, PORTABLE
4047	WRENCH, ASSEMBLY, SOCKET SAFING PIN
4053	ADAPTER, HOISTING, STABILIZING RING
4069	CLAMP SET, ADAPTER RING TO MISSILE SKIRT
4095	SHIPPING AND STORAGE CONTAINER, BALLISTIC MISSILE
4102	TRUCK, HAND, LIFT
4103	GRIP SET, UMBILICAL CABLE
4104	HOIST, CHAIN
4107	LEVEL SET, MISSILE BASE SUPPORT
4117	HOISTING UNIT
4125	ATTENUATOR, VARIABLE
4127	POWER SUPPLY
4141	DOLLY, GEARCASE-MOTOR
4143	HARNESS, BALLISTIC ACTUATOR
4144	HEADSET
4145	ADAPTER, HOISTING, MOTOR-GENERATOR

1.6.1 (CONT.)

FIG. A ITEM	MGE
4146	PLATE, LEVELING
4149	TRUCK, HAND, LIFT
4160	WIRE WRAPPING KIT
4167	LOAD BANK, ELECTRICAL
4172	PLUG-IN UNIT, OSCILLATOR
4175	JACK-SET, TRANSLATING
4179	CASE, ENCODER
4188	JACK SET, LEVELING
4191	TANK, LIQUID STORAGE, METAL
4192	BRIDGE, RESISTANCE
4206	SUPPORT RAMP
4217	SUPPORT SET, T-E
4218	SCALE, DIAL INDICATING
4263	BARRIER, LAUNCH TUBE ACCESS DOOR, SAFETY
4264	CABLE AND REEL ASSEMBLY, GROUNDING MISSILE
4265	COVER SET, SLING ROD ENDS
4267	SHELTER, ENVIRONMENTAL, ENTRANCE HATCH
4270	PLUMB BOB SET, TRANSPORTER-ERECTOR
4274	SUPPORT CRADLE, ROCKET MOTOR CARRIAGE, 3RD STAGE
4277	SLING, GEARCASE MOTOR
4278	SHELTER, ENVIRONMENTAL, TRANSPORTER - ERECTOR TO LAUNCHER
4280	POSITIONING KIT, CARRIAGE, ROCKET MOTOR KMU-116/E
4281	SUPPORT, CRADLE, ROCKET MOTOR CARRIAGE, 2BD STAGE
4282	HOIST, GEARCASE-MOTOR
4289	ROD ASSEMBLY; LAUNCHER CLOSURE LOCK REMOVAL
4290	ADAPTER, HOISTING, MULTIPLYING LINKAGE
4291	CLAMP, BALLISTIC ACTUATOR ROD
4292	COVER, ENVIRONMENTAL, LAUNCHER OPENING
4305	CYLINDER/VALVE, COMPRESSED GAS
4306	PLATE SET, TRANSPORTER - ERECTOR, HINGE TO PYLON
4307	RESTRAINT ROD, BASE ADAPTER RING TO TRANSPORTER-ERECTOR
4308	SLING, GUIDANCE & CONTROL, SHIPPING CONTAINER
4319	ADAPTER SET, CONNECTOR
4337	TRUCK, DOLLY, MOTOR-GENERATOR
4339	OHMMETER
4343	BRIDGE, IMPEDANCE

1.6.1 (CONT.)

FIG. A ITEM	MGE
4370	TEST STAND, GEARCASE - MOTOR
4375	STEP, DOOR ACTUATOR
4378	SLING, CHILLER UNIT AND PUMP
4382	CORD ASSEMBLY, ELECTRICAL
4386	WRENCH SET, ELECTRICAL CONNECTORS
4388	TEST SET, TELEPHONE EQUIPMENT
4394	SLING, GAS GENERATOR, LAUNCHER CLOSURE
4404	HOOK, HOIST, SUPPORT
4405	SUPPORT, HOIST, UMBILICAL CABLE
4408	WRENCH, TORQUE
4415	SLING, TRANSPORTER - ERECTOR ACTUATOR
4440	PLATES, MOUNTING, THEODOLITE
4441	PROTRACTOR STRIPSET, AUTOCOLLIMATOR BENCH RAIL
4442	CASE, DECODER, COMMAND SIGNAL
4443	TOOL, CODE CHANGE
4445	CONTROL, MISSILE ERECTION
4446	COVER, PERSONNEL ACCESS, LAUNCHER
4447	INSTALLATION - REMOVAL KIT, CARRIAGE VERTICAL RESTRAINT
4448	EXTENSION, MISSILE BASE ADAPTER RING
4451	CONTROLLER, POWER AZIMUTH DRIVE
4452	TRAVERSE PLATE, LAUNCH TUBE ACCESS DOOR
4456	FREQUENCY CONVERTER
4459	MULTIMETER, ELECTRONIC
4461	AMMETER
4468	THERMOMETER, ARMORED, STAINLESS - STEEL GROUND SPIKE
4471	MICROWAVE POWER METER
4472	GENERATOR, SIGNAL
4476	TESTER, PYROMETER AND THERMOCOUPLE
4479	OSCILLOSCOPE, DUAL BEAM
4483	KIT, SAFETY PIN INSTALLATION AND REMOVAL
4484	TOWBAR, MOTOR VEHICLE
4521	ALIGNMENT KIT, OPTICAL
4535	ALIGNMENT SET, MISSILE TRANSFER
4541	MAINTENANCE PLATFORM, LAUNCH CONTROL FACILITY

1.6.2 ACO ITEMS NOT REQUIRING FUNCTIONAL TESTING

ACO ITEM	
104	KIT, ADAPTER, INTRASITE CABLE, LF
105	KIT, ADAPTER, INTRASITE CABLE, LCF
112	JUNCTION BOX & CABLE SET, MISSILE SIMULATION KIT
115	HF SYSTEM TEST BREAKOUT BOX
116	CABLE EXTENSION
118	POWER CONTROL UNIT
119	CABLE KIT, C53C
120	CABLE, POWER, PROGRAMMER, TEST
123	JUNCTION BOX, TEST, SCN/CSA
125	ADAPTER, LF/DDG CABLE
126	ADAPTER, LCF/DDG CABLE
129	POWER SUPPLY SCN TEST, CSA
130	CABLE KIT, LCF/SCN TEST, CSA
131	CABLE, POWER, SECURITY RACK TEST
132	CABLE KIT, LF/SCN TEST, CSA
133	DUMMY LOAD, R/V
139	ADAPTER, SCN, FRONT PANEL
149	UHF SYSTEM TEST BREAKOUT BOX
151	POWER CABLE SET, CSA DRAWER TEST AREA
160	CABLE SET, HF/UHF
161	PANEL, DISTRIBUTION
162	CABLE POWER, HVC/SIN
166	PLUG, CAVITY, ENCODER
168	CIRCUIT CARD, FAULT SIMULATION G&C COUPLER
170	LF/SIN CHECKOUT ADAPTER
171	LCF/SIN CHECKOUT ADAPTER
172	PLUG, DECODER CAVITY
173	SIMULATOR, LF/SCN INTERFACE
176	FILTER, BOND PASS, E-I
178	TEST PLUG, E-I
180	TEST LEADS
181	CABLE SET, AC POWER (120V, 60 CPS)
182	CIRCUIT CARD, FAULT SIMULATION, PROGRAMMER GROUP
184	DISCONNECT, LF BATTERY, M-G SET
187	CABLE, SECURITY, SITE ACTIVATION
189	GENERATOR, PULSE
194	TRANSCEIVER, PORTABLE
195	CABLE, INTERCONNECTING, BATTERY CHARGER, POWER SUPPLY
197	CABLE SET, INTERCONNECTING BATTERY
200	ADAPTER, FLOW, G&C UMBILICAL

1.6.2 (CONT.)

ACO ITEM	
201	MANIFOLD, TEST, DRYER-AIR COMPRESSOR
204	ADAPTER, MANOMETER TO C-60B RACK AIR DUCT
211	PLUG, PRESSURE, BALLISTIC ACTUATOR ASSEMBLY
215	FIXTURE, HOLE LOCATING, MISSILE SUSPENSION SYSTEM, SPRING CAN
216	FIXTURE, MISSILE SUSPENSION SYSTEM LOADING
217	SET, FIXTURE, LIFTING, MAIN J-BOX
220	DRILL JIG, ADAPTER PLATE
229	TRUCK, 16' FLAT BED, W/HYDRAULIC CRANE
231	CABLE SET, CHOKE, LCF M-G SET
232	PLATFORM, WORK, LCF
233	ADAPTER, TORQUE, AZIMUTH DRIVE INSTALLATION
235	REMOVAL EQUIPMENT, SNOW AND ICE
245	BEAM-TYPE SLING
248	SLING, DOOR, VAULT, SECURITY PIT
270	CABLE, MISSILE GROUNDING
274	INDICATOR, PHASE SEQUENCE (400 CYCLE)
277	LCF/HVC CHECKOUT ADAPTER
278	LF/HVC CHECKOUT ADAPTER
279	B1 DIRECTIONAL POWER MONITOR
281	ADAPTER TEST MISSILE SIMULATOR KIT
282	ADAPTER, TEST, SCN INTERFACE SIMULATOR
283	ADAPTER, TEST, ACO ENCODER
284	TEST SET, CABLE SYSTEM
287	HANDLE, "T"
289	BREAKOUT BOX, CABLE SYSTEM
290	ADAPTER, COAZIAL CABLE
292	CABLE ASSEMBLY, GROUND CONNECTION
301	SCAFFOLDING, PORTABLE, LF AND LCF
306	PLUMB BOB
308	MANOMETER
311	FILTER, WATER, 10 MICRON
313	SAMPLING BOMB
314	SPOTTING SCOPE
315	MICROSCOPE
316	PSYCHROMETER, SLING
317	BENCH, TEST, ELECTRONIC
318	METER, AUDIO FREQUENCY POWER
320	DUMMY LOAD, UHF
321	GENERATOR, SIGNAL
322	DUMMY LOAD HF
337	VOLTMETER, VACUUM TUBE
341	FLOOR POLISHER
347	AMMETER, 500 AMP

1.6.2 (CONT.)

ACO ITEM	
352	LEAD, ELECTRICAL (GROUNDING)
355	TEST SET LCF POWER SUPPLY
356	TEST SET LF POWER SUPPLY
359	CONVERTER, HF
360	METER, RF POWER
362	MEGOHMMETER
367	OSCILLOSCOPE
368	OSCILLATOR, AUDIO FREQUENCY
370	THERMOMETER CONTACT
371	PUMP, CENTRIFUGAL, PORTABLE
375	SHELTER, MOBILE
379	HAND SET, SOUND POWERED
387	SPRAYER, PAINT, PORTABLE
392	TRANSIT
393	POWER SUPPLY
394	MILLIMETER, SLIP-ON DC
396	TEST SET, INSULATION BREAKDOWN
404	MOTOR-GENERATOR
405	HOIST, PORTABLE
407	BREATHING APPARATUS SELF CONTAINED
409	CABLE TESTER, PORTABLE
410	TESTER, COMBUSTIBLE GASES
411	TELEPHONE SET, FIELD
412	CAMERA, POLOROID, FLASH
413	TESTER, OXYGEN DEFICIENCY
414	TESTER, GAS, CARBON MONOXIDE
416	CAMERA, OSCILLOSCOPE
420	TRUCK, 9' VAN W/HOIST & HEAT
421	REPAIR KIT, VAPOR SEAL ENVELOPE
422	VOLTMETER, DIFFERENTIAL, AC-DC
424	METER, FREQUENCY
426	TACHOMETER
427	PUMP, CENTRIFUGAL, PORTABLE
430	HEATER, PORTABLE
431	TRUCK, ORDNANCE, HANDLING AND SUPPORT
432	TANK, DEIONIZED WATER
433	FAN, CIRCULATING
435	MONITOR, CURRENT RECORDING
439	KIT, PH METER
440	GENERATOR, SIGNAL
441	BUS TRAVEL-ALL
446	METER, FREQUENCY
474	TRUCK, 9' VAN
475	TRUCK, 9' VAN W/HEAT
476	TRUCK, 12' VAN W/HOIST & HEAT
477	TRUCK, 7 1/2' PANEL W/HEAT
478	TRUCK, 7 1/2' PANEL

1.6.2 (Cont.)

ACO Item	
482	Receiver, HF
483	Impedance Bridge, PF
485	Decade, Capacitance
486	Generator, Frequency
487	Variac
488	Interrupter, Circuit
489	Megohmmeter
490	Anemometer
491	Pitot Tube
492	Draft Gauge
494	Detector, Land Line
512	Sling Set, Rocket Motor Carriages
513	Inverter DC to AC
514	Vacuum Tube Voltmeter
516	Template, Drill, ESA Panel
517	Adapter, SIN Remove Ringing
518	Truck, Cable Maintenance
521	Power Cable Set
523	Cutoff Device, H. V. G&C Power Supply
524	Cable, Interim Outer Zone Security
525	Plug, SCS
526	Tripod, Theodolite
527	Chuck & Foot Adapter
528	Kit, Installation, Launcher Closure Actuator
529	Generator, Gasoline Driven
530	Wrench, "T" Handle
534	Monitor & Recorder, G&C Coupler Ingerface
535	HF Breakout Box
536	Electronic Counter
537	Fixture, Locating, LF Access Center Line
538	Jig, Drill, Intrasite Cable Feed Through
539	Jig, Locating LF, Autocollimator Mirror Mount
540	Deck Removable, Personnel Access Shaft
541	Kit, Locating, LF Main "J" Box
542	Variator, Pressure - Vacuum
543	Voltmeter, Precision, DC
544.2	Placard, LF Shutdown/Start-Up Procedure
545.2	Placard, LCF Shutdown/Start-Up Procedure
546	Power Supply
601	Alignment Pin, Rocker Arm to Upper Bracket
604	Sling
606	Cover Protective, Electronic Rack

1.6.2 (CONT.)

ACO ITEM	
608	ENVIRONMENTAL ENCLOSURE - LCF
609	SPANNER, LOWER
610	MARKER, AZIMUTH, INDICATOR
612	LIFT BASKET
613	ALIGNMENT PIN, PENDULUM ROD TO ROCKER ARM
614	SAFETY BARRIER, LF PERSONNEL ACCESS SHAFT
624	JIG
625	JIG
629	COVER, PROTECTIVE, LCC FLOOR
632	RAMP-ACCESS, PORTABLE LCC
640	FLOOR, WIRE-MESH
643	LOAD NG PLATFORM - PORTABLE LCF
645	DOLLY, LIFT, TILTING, LCF
652	RAILING, GUARD, SUPPORT BUILDING ACCESS (PORTABLE HANDRAILS)
653	RAILING, HAND, LCC ENTRANCE
654	KIT, PURGE & DRY
655	LEVELING FRAME, SUPPORT AND SUSPENSION SYSTEM, UPPER BRACKETS
656	ADAPTER, HOIST TO BEAM
658	SEMITRAILER, VAN, LF AND LCF ASSEMBLY
659	COVER, PROTECTIVE, UMBILICAL CABLE HEAD
670	CONTAINER, ORDNANCE STORAGE
671	HOIST & SUPPORT ASSEMBLY
672	CABLE ASSEMBLY, LF AND LCF PREHEAT
674	CONDUCTIVITY CELL
675	LIFT PLATE
676	SLING
680	SUPPORT, HOIST, EMP RACK EMPLACEMENT
683	CRADELE, BALLISTIC GAS GENERATOR
690	CANOPY, ENVIRONMENTAL, LF ACCESS HATCH
691	SHELTER, ENVIRONMENTAL
692	BRUSH, ELECTROPLATING
694	STRAP WRENCH
696	DEMINERALIZATION UNIT, ION EXCHANGE, TRUCK MOUNTER
697	FIXTURE, TRACK ALIGNMENT
698	CHECKING TOOL, SIGHT TUBE
699	COVER, END-C&C SECTION
706	GENERATOR, RINGING
707	ELEVATOR & WORK CAGE
708	SUPPORT FRAME, ROLLING
717	BARRIER, SAFETY LAUNCHER OPENING

1.6.2 (CONT.)

ACO ITEM	
730	POWER SUPPLY, D. C.
741	TEST SET, PROGRAMMER GROUP (INTERIM MODEL)
775	ATTENUATOR, VIDEO
778	ADAPTER, TEST, G&C COUPLER
907	RESISTRO, DECADE
914	PROBE, AC CURRENT
929	TEST SET, POWER SUPPLY
935	TEST TOOL-TEST SET, EXPLOSIVE SET CIRCUITRY
0553	TRANSFORMER, RATIO
0554	SHIFTER, PHASE
0555	STANDARD, VOLTAGE
0558	OSCILLATOR, WIDE RANGE
0559	OSCILLATOR, 400-CYCLE
0560	AC - DC CONVERTER, MODEL 100 A CSC
0583	KIT, MODULE CONNECTOR, ALIGNMENT
0584	TIME INTERVAL UNIT
0585	TRAVERSE TARGET SET
0590	VOLTMETER, PRECISION, DC, CSC, 200 AR
0593	RESISTANCE BOX, DECODE
0599	SIMULATOR, LOAD
0642	OPTICAL ALIGNMENT SET
0719	ACCESSORY KIT, OPTICAL ALIGNMENT
0721	CABLE SET, OPERATIONAL TARGETING VEHICLE
0722	CASE, HANDLING TAPE
0820	SIMULATOR, TEST SET, R/V
3009	PULLER, PRINTED CIRCUIT CARD
3022	TRUCK, DOLLY
3023	THERMOMETER, SELF INDICATING
3039	FREON LEAK DETECTOR
3046	BATTERY FILLER, GRAVITY
3059	STOP WATCH
3067	VOLTMETER, D. C.
3074	TAPE, FISH, STEEL
3078	TRUCK, FORK, LIFT
3080	TRUCK, TRANSPORTER
3096	SHIPPING AND STORAGE CONTAINER, ELECTRONIC EQUIPMENT
3119	ADAPTER, SPANNER
3126	DITCHING MACHINE, CRAWLER-MOUNTER, LADDER TYPE
3136	AMMETER, D. C.
3140	INDICATOR, DIGITAL DISPLAY

1.6.2 (CONT.)

ACO ITEM	
4001	MULTIMETER
4004	OSCILLOSCOPE
4006	OSCILLATOR, AUDIO FREQUENCY
4024	SEMITRAILER, G&C - R/V
4031	TRUCK, MECHANICAL MAINTENANCE
4038	BARRIER, SAFETY, LAUNCHER OPENING
4047	WRENCH, SAFING PIN
4053	ADAPTER HOISTING, STABLIZING RING
4054	CRANE, TRUCK MOUNTED
4059	SEMITRAILER, T-E AND TRUCK
4062	TRUCK, TARGETING
4063	TRUCK, ELECTRONIC MAINTENANCE
4069	CLAMP ASSEMBLY, MISSILE SKIRT TO BASE
4075	TRACTOR, T-E
4105	TRACTOR, LAUNCHER CLOSURE
4107	LEVEL SET, MISSILE BASE SUPPORT
4116	TRUCK, TRACTOR (R/V - G&C MAINTENANCE)
4119	TRUCK, T-E SUPPORT
4127	POWER SUPPLY
4129	TRAILER, BALLISTIC MISSILE
4130	TRACTOR, BALLISTIC MISSILE
4141	TRUCK, DOLLY, TRACTOR, LAUNCHER CLOSURE
4144	HEADSET, INTERPHONE, SIN/LCF - LF
4146	PLATE, SURFACE
4147	LEVEL, PRECISION, MASTER
4160	WRAPPING KIT, SOLDERLESS
4172	PLUG-IN UNIT, OSCILLOSCOPE
4191	TANK, LIQUID STORAGE, METAL
4192	BRIDGE, RESISTANCE
4220	TEST SET, RELAY
4244	HOLDING FIXTURE, HOISTING UNIT
4258	WRENCH, TORQUE
4263	BARRIER, SAFETY, LAUNCH TUBE ACCESS DOOR
4264	CABLE AND REEL ASSEMBLY, GROUNDING MISSILE
4265	PAD, CUSHIONING, MISSILE SLING ROD ENDS
4267	COVER, PROTECTIVE, VEHICLE TO ACCESS SHAFT
4270	PLUMB BOB SET, T-E
4271	COVER, FITTED, T-E
4278	SHETTER, ENVIRONMENTAL, T/E TO LAUNCH TUBE
4285	HEATER, DUCT TYPE, PORTABLE
4286	DRAIN UNIT COOLANT
4292	COVER, ENVIRONMENTAL, LAUNCHER OPENING
4305	CYLINDER & VALVE ASSEMBLY
4306	PLATE, ADJUSTABLE, T/E HINGE TO PYLON

1.6.2 (CONT.)

ACO ITEM	
4307	RESTRAINT SET, BASE ADAPTER RING TO T/E
4319	LEAD SET, TEST
4337	ADAPTER, MOTOR-GENERATOR SET TO DOLLY TRUCK
4349	TESTING KIT, PRESSURE, SCN CABLE SYSTEM
4369	COUNTER, ROTATING, HAND HOLD
4370	TEST STAND, TRACTOR, LAUNCHER CLOSURE
4381	OHMMETER
4382	CORD ASSEMBLY, ELECTRICAL
4386	WRENCH SET, ELECTRICAL
4388	TEST SET, TELEPHONE EQUIPMENT
4416	METER, AIR VELOCITY
4445	STAND ASSEMBLY, T/E CONTROL PANEL
4447	KIT, INSTALLATION REMOVAL, VERTICAL RESTRAINT MKU-117/E
4448	EXTENSION, MISSILE BASE ADAPTER RING
4451	CONTROLLER, PORTABLE HAND POWERED AZIMUTH DRIVE SYSTEM
4452	TRAVERSE PLATE, LAUNCH TUBE ACCESS DOOR
4456	CONVERTER FREQUENCY
4458	VOLTMETER, VACUUM TUBE
4460	AMMETER
4461	AMMETER, AC/DC
4471	POWER, METER, MICROWAVE
4472	GENERATOR, FUNCTION, LOW FREQUENCY
4476	TESTER, PYROMETER AND THERMOCOUPLE
4478	THERMISTOR MOUNT, COAXIAL
4480	ATTENUATOR (0-12 DB)
4484	TOWBAR, MOTOR VEHICLE
4524	WRENCH, PORTABLE ELECTRIC
4525	STOP, RAILCAR WHEEL
4533	TESTER, TORQUE WRENCH AND TENSIOMETER
4534	TORQUE TESTER
4535	ALIGNMENT SET, MISSILE TRANSFER
4537	TESTER, DEAD WEIGHT, HYDRAULIC PRESSURE GAGE
4552	INDICATOR, PHASE SEQUENCE (60 CYCLE)
4623	TEST, KIT, CHRONRATE
4634	TOOL ASSEMBLY - RESETTING LAUNCHER CLOSURE ACTUATOR
7600	COVER, END, G&C SECTION
7665	KIT, ABLATIVE MATERIAL REPAIR
10700	POTENTIOMETER, DECADE
10701	RECORDER
10702	BRIDGE, IMPEDANCE
10706	PLUG-IN UNIT, VIDEO AMPLIFIER
10707	PLUG-IN UNIT, OSCILLOSCOPE, DIFFERENTIAL
10708	POWERSTAT, 3-PHASE VARIABLE TRANSFORMER

2.0 PROCESSING OPERATIONS

2.1 CSA ACTIVATION

THE TESTS REQUIRED AND DOCUMENTATION CONTAINING DETAILED TEST PROCEDURES FOR THE ACTIVATION OF THE CSA ARE SPECIFIED IN TABLE 1. THIS TABLE COVERS TESTING REQUIRED FOR CERTIFICATION OF ALL ACO EQUIPMENT.

ITEM NO.	ACO NO	EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT		EFFECTIVITY
				DOC. NO.	SEC.	
2.1.1		EQUIPMENT COOLING AIRFLOW ADJUSTMENT		D2-14553-5	B	
2.1.2	100.2	START-UP UNIT, LAUNCH FACILITY OGE		D2-13973	3	
2.1.3	106	SIMULATOR, LAUNCH CONTROL		D2-11768		
2.1.4	107	SIMULATOR, OPERATIONAL MECHANICAL DECODER		D2-12625-4		
2.1.5	124	GENERATOR, MESSAGE, SCN		D2-13512-4		
2.1.6	127	ADAPTER, TEST, CSA/SCN/DDG		[1]		
2.1.7	155	KIT, R/V CONTINUITY TEST		D2-13455-4		
2.1.8	179	TEST SET, BIT ERROR, SCN		D2-14683 PARA. 5.1 THRU 5.1.8.4		

[1] D2-13513, VOL. 4 EXCEPT DELETE THE CONTINUITY TEST PORTION OF PARAGRAPHS 7.2 THROUGH 7.2.7.

TABLE 1 (CONT.)

ITEM NO.	ACO NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	PROCEDURES DOCUMENT SEC.	EFFECTIVITY
2.1.9	372	RECORDER, LAUNCH EVENTS		D2-1397143	3	
2.1.10	467	HEATER ASSEMBLY, LF PREHEAT		D2-10027	PARA. 8.3	
2.1.11	743	OPERATIONAL DECODER SIMULATOR		D2-14197-4		
2.1.12		MISSILE TARGETING SET, PART OF ACO-4062.2	▷1	D2-11296-2	--	
2.1.13	0623**	ADAPTER GROUP, TEST		D2-11292	--	
2.1.14	0624**	PROGRAMMER-FAULT LOCATOR, TEST CENTER		D2-11294	--	
2.1.15	0667	BATTERY POWER SUPPLY		D2-11298	--	
2.1.16	0685.2	CONTROL-GUIDANCE COUPLER, TEST SET		D2-11300-2	--	
2.1.17	0717.2	PHOTO-ELECTRONIC COLLIMATOR, TEST SET		D2-11303-2	--	
2.1.18	3013	TEST SET, CONSOLES, COMMUNICATION LAUNCH CONTROL		D2-6901-12	-	
2.1.19	2950	FAULT LOCATOR, PORTABLE OZ/IZ		D2-14790	-	
2.1.20	2952**	TEST SET, OZ/IZ		D2-14788	-	

▷1 THE MISSILE TARGETING SET IS TESTED IN THE TARGETING TRUCK (ACO-4062) AT THE CSA.

** TEST AFTER ASSEMBLY

TABLE 1 (CONT.)

ITEM NO.	ACO NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	PROCEDURES DOCUMENT SEC.	EFFECTIVITY
2.1.21	2953	FAULT LOCATOR, PORTABLE LCFSS		D2-15116		
2.1.22	2954**	TEST SET, LCFSS		D2-15114		
2.1.23	3035	TEST SET, GUIDANCE SECTION, LIQUID COOLER		D2-12647	2	
2.1.24	3056	TEST STAND, HYDRAULIC SYSTEM COMPONENTS		[1]		
2.1.25	3092	TEST SET, PROGRAMMER GROUP		D2-7834-12	-	
2.1.26	3113	DUMMY DECODER, RELAY ASSEMBLY		D2-9383-12	-	
2.1.27	4012	TEST SET, DATA ANALYSIS CENTRAL		D2-10071-12	-	
2.1.28	4018**	ADAPTER GROUP, TEST		D2-7832-13	-	
2.1.29	4043	ELEVATOR-WORK CAGE, PASSENGER AND EQUIPMENT		D2-20675	--	
2.1.30	8115	AIR CONDITIONER		D2-11623-2 [2]	--	

** TEST AFTER ASSEMBLY

[1] TEST PER T. O. 33A2-2-6-51, PARAGRAPHS 5-3 THRU 5-9, EXCEPT CHECK THERMOMETER PER PARAGRAPH 7-4, AND EXCEPT DO NOT CHECK ACCURACY OF FLOWMETER.

[2] USE D2-10825-26, SEC. III UNTIL D2-11623-2 IS AVAILABLE. RETEST IS NOT REQUIRED.

ITEM NO.	ACO NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST	PROCEDURES DOCUMENT DOC. NO.	SEC.	EFFECTIVITY
2.1.31	4150**	TEST-REPAIR SET, COOLER, GUIDANCE SECTION	D2-12646-3		
2.1.32	4152**	TEST EQUIPMENT, ELECTRONIC FACILITY-BASE MAINTENANCE	D2-13796-5		
2.1.33	4487	SIMULATOR, COMMAND SIGNALS	D2-14203-12		
2.1.34	4489	MESSAGE GENERAGOR	D2-14204-12		
2.1.35	4523	POWER SUPPLY	D2-11344-12		
2.1.36	4539	TEST SET, VOICE REPORTING, SIGNAL ASSEMBLY	D2-11360-12		
2.1.37	10709	TEST SET, MISSILE CONTROL GROUP	D2-11326 & D2-14279	-	
2.1.38	114	MISSILE DOWNSTAGE & AUXILLIARY LAUNCHER SIMULATOR	D2-13971-1	3	
2.1.39	3007	TEST SET, EXPLOSIVE SET CIRCUITRY	D2-15910-1	-	

** TEST AFTER ASSEMBLY

2.2 PREASSEMBLY TESTING

THE PREASSEMBLY TESTING REQUIRED FOR OGE PRIOR TO ASSEMBLY IN THE OPERATING CONFIGURATION AND THE TESTING REQUIRED FOR PORTABLE MGE PRIOR TO ITS EMPLACEMENT IN THE SMSB IS SPECIFIED IN TABLE 2.

ITEM NO.	FIG.A NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	PROCEDURES DOCUMENT SEC.	EFFECT-IVITY
2.2.1	1201	PROGRAMMER GROUP	OA-388/GSW-4	02-7817-12		
2.2.2	1213 1265	DATA ANALYSIS CENTRAL	AN/GYK-1(V)	02-10065-12		
2.2.3	1228 1251	DATA ANALYSIS CENTRAL	AN/GYK-2	02-10066-12		
2.2.4	1279	REPEATER, TELEPHONE	TA-461/GYK-2	02-10069-12		
2.2.5	1320	REPEATER TELEPHONE SET	AN/GTC-10	02-11356-12		
2.2.6	1364	REPEATER, TELEPHONE SET	AN/GTC-11	02-11357-12		
2.2.7	1365	REPEATER TELEPHONE SET	AN/GTC-12	02-11358-12		
2.2.8	1366	REPEATER TELEPHONE SET	AN/GTC-13	02-11359-12		
2.2.9		PAS PANEL ASSEMBLY		02-14056-12		
2.2.10	1368A	RADIO SET	AN/GTC-113	02-11341-12		

ITEM NO.	FIG. A NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	PROCEDURES DOCUMENT SEC.	EFFECTIVITY
2.2.11	603.2	MISSILE TARGETING SET [2]	AN/GJQ-13	D2-11296-2	--	
2.2.12	667	BATTERY POWER SUPPLY		D2-11298	--	
2.2.13	695.2	TEST SET, CONTROL-GUIDANCE COUPLER	AN/GJM-17	D2-11300-2	--	
2.2.14	717.2	TEST SET, PHOTO-ELECTRONIC COLLIMATOR	TS-1707/GJM	D2-11303-2	--	
2.2.15	2950	OZ/IZ PORTABLE FAULT LOCATOR		D2-14790	--	
2.2.16	2953	FAULT LOCATOR, PORTABLE, LCFSS		D2-15116	--	
2.2.17	3013	TEST SET, CONSOLES, COMMUNICATION LAUNCH CONTROL	AN/GSM-58	D2-6901-12	--	
2.2.18	3035	TEST SET, GUIDANCE SECTION, LIQUID COOLER	TTU-157/F37U	D2-12647	2	
2.2.19	3056	TEST STAND, HYDRAULIC SYSTEM COMPONENTS	TTU-161/E	[1]	--	
2.2.20	3092	TEST SET, PROGRAMMER GROUP	AN/GSM-57	D2-7834-12		
2.2.21	3113	DUMMY DECODER-RELAY ASSEMBLY	TS-1604/GSM	D2-9383-12		

[1] TEST PER T.O. 33A2-2-6-51, PARAGRAPH 5-3 THROUGH 5-9, EXCEPT CHECK THERMOMETER PER PARAGRAPH 7-4, AND EXCEPT DO NOT CHECK ACCURACY OF FLOWMETER.

[2] THIS ITEM IS PART OF TARGETING TRUCK, FIGURE A 4062. TEST FIG. A 603 (ASSEMBLED IN TARGETING TRUCK) AT THE CSA.

ITEM NO.	FIG.A NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST			PROCEDURES DOCUMENT DOC. NO.	SEC.	EFFECTIVITY
2.2.22	4012	TEST SET, DATA ANALYSIS CENTRAL	AN/GYM-1		D2-10071-12	--	
2.2.23	4043	ELEVATOR WORK-CAGE, PASSENGER & EQUIPMENT	GSU-100/E		D2-20675	--	
2.2.24	4115	AIR CONDITIONER	A/F32C-10		D2-11623-2 (2)	--	
2.2.25	4487	SIMULATOR, COMMAND SIGNALS	SM-315/GYK-2		D2-14203-12	--	
2.2.26	4489	MESSAGE GENERATOR	MX-3625/GSM-62		D2-14204-12	--	
2.2.27	4490.	SIMULATOR SET, ELECTRICAL FUNCTIONS, MISSILE & LAUNCH	AN/GSM-62		(1)		
2.2.28	4491	START-UP UNIT, LAUNCH FACILITY	OA-3966/GSM-62		D2-9367-12	-	
2.2.29	4523	POWER SUPPLY	PP-3267/GSM		D2-11344-12	-	
2.2.30	4539	TEST SET, VRSA	TS-1724/GSW-4		D2-11360-12	-	
2.2.31	6209	BATTERY POWER SUPPLY (SE-12) III STAGE			D2-13581-2 PARA. 6.1		
2.2.32	10709	TEST SET, MISSILE CONTROL GROUP			D2-11326 & D2-14279		
2.2.33	3007	TEST SET, EXPLOSIVE SET CIRCUITRY			D2-15310-1		

(1) THE SET CONSISTS OF:
(A) RECORDER, SIGNA DATA
(B) DISTRIBUTION BOX
(C) SIMULATOR, ELECTRICAL FUNCTIONS, MISSILE LAUNCH

NO TEST IS REQUIRED OF ITEMS A & B. ITEM C IS TO BE TESTED PER D2-11338-12

(2) USE D2-10825-26, SECTION III UNTIL D2-11623-2 IS AVAILABLE. RETEST IS NOT REQUIRED.

3.0 LAUNCH CONTROL FACILITY TESTING

THE TESTS REQUIRED AND DOCUMENTATION CONTAINING DETAILED TEST PROCEDURES FOR CHECKOUT OF EQUIPMENT IN THE LAUNCH CONTROL FACILITY ARE SPECIFIED IN TABLE 3.

ITEM NO.	FIG.A NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	PROCEDURES DOCUMENT SEC.	EFFECTIVITY
3.1	1420.2 1421.2	SHOCK ISOLATION SYSTEM		D2-14400 PARA. 6.0 THRU 6.5.4	--	ALL FLIGHTS
3.2	1418.3 1428.3 1432.3	BLAST VALVE SUBSYSTEM CHECKOUT.		D2-15023	--	ALL FLIGHTS
3.3	--	EQUIPMENT COOLING AIRFLOW ADJUSTMENT <1>		D2-14553-5	C	ALL FLIGHTS
3.4	--	ELECTRICAL POWER SYSTEM TESTS <2>		D2-7819-13		ALL FLIGHTS
3.5	1243	LAUNCH CONTROL CONSOLE, OA-3384/GSW-4		D2-6913-13		ALL FLIGHTS
3.6	--	DATA ANALYSIS CENTRAL EQUIPMENT (SCN TESTS)		D2-10065-13		ALL FLIGHTS
3.7	--	SIN SYSTEM CHECKOUT		D2-10063-13		ALL FLIGHTS
3.8	1338	COMMUNICATIONS CONTROL CONSOLE	OA-3460/GSW-4	D2-11337-13		ALL FLIGHTS
3.9	1320	SAC/CTE TELEPHONE REPEATER SET	AN/GTC-10	D2-11356-13		1 & T
3.10	1364	SAC/CTE TELEPHONE REPEATER SET	AN/GTC-11	D2-11357-13		A & O
3.11	1365	SAC/CTE TELEPHONE REPEATER SET	AN/GTC-12	D2-11358-13		F, P & S.
3.12	1366	SAC/CTE TELEPHONE REPEATER SET	AN/GTC-13	D2-11359-13		B, C, D, E, G, H, J, K, L, M, N, Q, & R.

<1> THE EQUIPMENT COOLING AIRFLOW ADJUSTMENT MUST BE ACCOMPLISHED AND THE ENVIRONMENTAL CONTROL SYSTEM OPERATING PRIOR TO THE APPLICATION OF POWER TO ANY EQUIPMENT REQUIRING COOLING AIR.

<2> THE ELECTRICAL POWER SYSTEM TESTS MUST BE ACCOMPLISHED PRIOR TO THE PERFORMANCE OF ANY TEST SPECIFIED IN ITEMS 3.3 THROUGH 3.17.

ITEM NO.	FIG. A NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	SEC.	EFFECTIVITY
3.13	1368.4	RADIO SET AN/GRC-113		D2-11341-13	--	ALL FLIGHTS
3.14	1423	ANTENNA GROUP AN/GRA-72		D2-20070-13	--	ALL FLIGHTS
3.15	1424.2	ANTENNA AS-1212/GRC-113		D2-11343-13	--	ALL FLIGHTS
3.16		CHECKOUT OF ANTENNA (SOFT HF RECEIVING/TRANSMITTING) CONSISTING OF ANTENNA (COLLINS) TYPE 237W-1X AND FIG. A. 1425 ELECTRICAL SURGE ARRESTER.		D2-14053-13	--	ALL FLIGHTS
3.17		FAULT LOCATOR TEST		D2-14555-5	D	ALL FLIGHTS
3.18		PERIMETER SECURITY SYSTEM		D2-15121	-	ALL FLIGHTS

4.0 LAUNCH FACILITY TESTING

THE TESTS REQUIRED AND DOCUMENTATION CONTAINING DETAILED TEST PROCEDURES FOR CHECKOUT OF EQUIPMENT IN THE LAUNCH FACILITY ARE SPECIFIED IN TABLE 4.

ITEM NO.		EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	PROCEDURES DOCUMENT SEC.	EFFECTIVITY
4.1	--	EQUIPMENT COOLING AIRFLOW ADJUSTMENT [1]		D2-14553-5	D	ALL FLIGHTS
4.2	--	ELECTRICAL POWER SYSTEM TESTS [2]		D2-7818-13	-	ALL FLIGHTS
4.3	--	DATA ANALYSIS CENTRAL EQUIPMENT (SCN TESTS)		D2-10066-13	-	ALL FLIGHTS
4.4	--	LIQUID COOLING EQUIPMENT GROUND GUIDANCE AND CONTROL TESTS		D2-10735-2	-	ALL FLIGHTS
4.5	--	LAUNCH FACILITY START-UP TESTS		D2-14550-5	-	ALL FLIGHTS
4.6	--	LAUNCH FACILITY END-TO-END TEST		D2-14551-5	-	ALL FLIGHTS
4.7	--	SECURITY SYSTEM TEST		D2-11276-5	-	ALL FLIGHTS
4.8	--	LF - MISSILE INTEGRATION TEST (SEE ITEM 6.11)				
4.9	--	ORDNANCE DEVICE POSTASSEMBLY TESTS				
4.9.1		ROTARY ACTUATOR CARTRIDGE (PART OF FIG. A 1202)		D2-7376 PARA. 6.15 AND 6.16	2	ALL FLIGHTS
4.9.2		GAS GENERATOR (PART OF FIG. A 1280)		D2-5959	1	ALL FLIGHTS
4.9.3		SQUIB AND JUMPER CABLE ASSEMBLY (PART OF FIG. A 1248)		[3]	-	ALL FLIGHTS

[1] THE EQUIPMENT COOLING AIRFLOW ADJUSTMENT MUST BE ACCOMPLISHED AND THE ENVIRONMENTAL CONTROL SYSTEM OPERATING PRIOR TO THE APPLICATION OF POWER TO ANY EQUIPMENT REQUIRING COOLING AIR.

[2] THE ELECTRICAL POWER SYSTEM TESTS MUST BE ACCOMPLISHED PRIOR TO THE PERFORMANCE OF ANY TEST SPECIFIED IN ITEMS 4.3 THROUGH 4.11.

[3] TEST ACCOMPLISHED AS PART OF SECONDARY ORDNANCE CIRCUITS TEST IN D2-14552-5, SEC. C.

ITEM NO.		EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	SEC.	EFFECTIVITY
4.10	--	MISSILE SUPPORT SYSTEM AZIMUTH DRIVE TEST		D2-14702		ALL FLIGHTS
4.11	--	GROUNDING AND ORDNANCE CIRCUIT TEST				ALL FLIGHTS
4.11.1	--	SILO GROUNDING TEST		D2-14552-5	B	ALL FLIGHTS
4.11.2	--	SECONDARY ORDNANCE CIRCUITS TEST		D2-14552-5	C	ALL FLIGHTS
4.11.3	--	LF MISSILE GROUND CONTINUITY TEST		D2-14552-5	D	ALL FLIGHTS
4.11.4	--	GAS GENERATOR AND UMBILICAL RETRACT ORDNANCE CIRCUIT TEST		D2-14552-5	E	ALL FLIGHTS
4.12	--	LAUNCHER CLOSURE ACTUATING AND LOCKING MECHANISM TEST		D2-5959	1	ALL FLIGHTS
4.13		TELEPHONE EQUIPMENT, SIN/LF TEST		D2-10062-13		ALL FLIGHTS
4.14	--	INTERIM SECURITY TEST		SEE PARA. 1.5.13 THIS DOCUMENT		ALL FLIGHTS

5.0 SMSB TESTING

THE TESTS REQUIRED AND DOCUMENTATION CONTAINING DETAILED TEST PROCEDURES FOR CHECKOUT OF EQUIPMENT IN THE SMSB ARE SPECIFIED IN TABLE 5.

ITEM NO.	FIG.A NO.	EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	PROCEDURES DOCUMENT SEC.	EFFECTIVITY
5.1	---	EQUIPMENT COOLING AIRFLOW ADJUSTMENT [2]		D2-14553-5	E	
5.2	623	ADAPTER GROUP TEST	OA-3544/GJM-15	D2-11292	--	
5.3	624	PROGRAMMER-FAULT LOCATOR TEST CENTER	AN/GJM-15	D2-11294	--	
5.4	4018	ADAPTER GROUP TEST	AN/GSM-61	D2-7832-13		
5.5	4150	TEST REPAIR SET, COOLER, GUIDANCE SECTION	A/E37V-3	D2-12646-3	--	
5.6	4152	ELECTRICAL FACILITY-BASE MAINTENANCE TEST EQUIPMENT	A/F37V-	D2-13794-5	--	
5.7	4169	MOTOR-GENERATOR SET, SKID MOUNTED, TYPE MD-2		[1]		
5.8	4252	CODE INSERTER - VERIFIER SET	AN/GSW-65	D2-13678-5	--	
5.9	--	FUNCTIONAL TEST PROCEDURE FOR INSOLATION M-G SET INSIDE THE SHIELDED ROOM - ALL SMSB's		D2-14955	1	
5.10	2952	TEST SET, OZ/IZ		D2-14788	-	
5.11	2954	TEST SET, LCFSS		D2-15114	-	

[1] T.O. 35C2-2-32-11, PARAGRAPH 3A-8

[2] THE EQUIPMENT COOLING AIRFLOW ADJUSTMENT MUST BE ACCOMPLISHED AND THE ENVIRONMENTAL CONTROL SYSTEM OPERATING PRIOR TO THE APPLICATION OF POWER TO ANY EQUIPMENT REQUIRING COOLING AIR.

6.0 INTEGRATION TESTS

THE TESTS REQUIRED AND DOCUMENTATION CONTAINING DETAILED TEST PROCEDURES FOR FLIGHT, SQUADRON AND WING INTEGRATION TESTING ARE SPECIFIED IN TABLE 6.

ITEM NO.		EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	PROCEDURES DOCUMENT SEC.	EFFECTIVITY
6.1		INTRAFLIGHT SCN LINE EQUALIZATION TEST				
6.1.1		STATUS LINE EQUALIZATION TEST		D2-14554-5	B	ALL FLIGHTS
6.1.2		LCF TO LF COMMAND LINE EQUALIZATION TEST		D2-14554-5	C	ALL FLIGHTS
6.1.3		LF TO LCF COMMAND LINE EQUALIZATION TEST		D2-14554-5	D	ALL FLIGHTS
6.1.4		LF TO LF COMMAND LINE EQUALIZATION TEST		D2-14554-5	E	ALL FLIGHTS
6.2		SIN INTEGRATION TESTS				
6.2.1		SIN LINE EQUALIZATION TEST		D2-14555-5	B	ALL FLIGHTS
6.2.2		LCF - LF SIN INTEGRATION TEST		D2-14555-5	C	ALL FLIGHTS
6.3		SINGLE THREAD TESTS				
6.3.1		SINGLE THREAD COMMAND AND MONITOR TEST		D2-14556-5	B	ALL FLIGHTS
6.3.2		SINGLE THREAD SECURITY SYSTEM TEST		D2-14556-5	C	ALL FLIGHTS

ITEM NO.		EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT DOC. NO.	SEC.	EFFECTIVITY
6.4		ELECTRO INTERFERENCE INTEGRATION TESTS				
6.4.1		LCF TO LF SCN COMMUNICATIONS EI TEST		D2-14566-5	B	ALL FLIGHTS
6.4.2		LF TO LCF SCN COMMUNICATIONS EI TEST		D2-14566-5	C	ALL FLIGHTS
6.4.3		SIN COMMUNICATIONS EI TEST		D2-14566-5	D	ALL FLIGHTS
6.4.4		SAC COMMUNICATIONS EI TEST		D2-14566-5	E	ALL FLIGHTS
6.4.5		SQUADRON HVC EI TEST		D2-14566-5	F	ALL SQUADRONS
6.4.6		WING EWO EI TEST		D2-14566-5	G	WING V
6.4.7		WING PAS EI TEST		D2-14566-5	H	WING V
6.5		LAUNCH NET VERIFICATION TESTS				
6.5.1		CODE PACK SAFING TEST		D2-14559-5	B	ALL FLIGHTS
6.5.2		SITE TAILORING		D2-14559-5	C	ALL FLIGHTS
6.5.3		SAFING PLUG REMOVAL		D2-14559-5	D	ALL FLIGHTS
6.5.4		FLIGHT SCN TEST		D2-14559-5	E	ALL FLIGHTS

TABLE 6 (CONT.)

ITEM NO.		EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT		EFFECTIVITY
				DOC. NO.	SEC.	
6.6		SCN SQUADRON INTEGRATION TEST				
6.6.1		LF SAFETY INSPECTION AND TEST		D2-14562-5	B	ALL FLIGHTS
6.6.2		INTERFLIGHT COMMAND LINE EQUALIZATION TEST		D2-14562-5	C	ALL FLIGHTS
6.6.3		INTERFLIGHT SITE TAILORING TEST		D2-14562-5	D	ALL FLIGHTS
6.6.4		INTERFLIGHT SCN INTEGRATION TEST		D2-14562-5	E	ALL FLIGHTS
6.7		HVC SQUADRON INTEGRATION TESTS				
6.7.1		LCF-LCF HVC LINE EQUALIZATION TEST		D2-14561-5	B	ALL FLIGHTS
6.7.2		LCF-LF HVC LINE EQUALIZATION TEST		D2-14561-5	C	ALL FLIGHTS
6.7.3		LCF-LCF HVC COMMUNICATION TEST		D2-14561-5	D	ALL FLIGHTS
6.8		PAS WING INTEGRATION TESTS				
6.8.1		PAS SOFT TELCO INTERFACE TEST		D2-14563-5	B	WING V
6.8.2		PAS HARD TELCO INTERFACE TEST		D2-14563-5	C	WING V
6.8.3		PAS LINE EQUALIZATION TEST		D2-14563-5	D	WING V
6.8.4		PAS COMMUNICATION TEST		D2-14563-5	E	WING V

TABLE 6 (CONT.)

ITEM NO.		EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT		EFFECTIVITY
				DOC. NO.	SEC.	
6.9		EWO WING INTEGRATION TESTS				
6.9.1		PRIMARY EWO OPERATIONAL TEST		D2-14564-5	B	WING V
6.9.2		SECONDARY EWO, SCP TO REPEATER, LINE EQUALIZATION TEST.		D2-14564-5	C	WING V
6.9.3		SECONDARY EWO, SCP TO SCP, LINE EQUALIZATION TEST		D2-14564-5	D	WING V
6.9.4		SECONDARY EWO, SCP FLI DRAWER TEST		D2-14564-5	E	WING V
6.9.5		SECONDARY EWO OPERATIONAL TEST		D2-14564-5	F	WING V
6.10		456L WING INTEGRATION TESTS				
6.10.1		465L TELCO INTERFACE TEST		D2-14565-5	B	WING V
6.10.2		465L, SRCC TO REPEATER, LINE EQUALIZATION TEST		D2-14565-5	C	WING V
6.10.3		465L, END-TO-END, LINE EQUALIZATION		D2-14565-5	D	WING V

TABLE 6 (CONT.)

ITEM NO.		EQUIPMENT NOMENCLATURE OR NAME OF TEST		PROCEDURES DOCUMENT		EFFECTIVITY
				DOC. NO.	SEC.	
6.11		LF- MISSILE INTEGRATION TESTS				
6.11.1		MIRROR ALIGNMENT TEST		D2-14560-5	B	ALL FLIGHTS
6.11.2		MISSILE ALIGNMENT TEST		D2-14560-5	C	ALL FLIGHTS
6.11.3		MISSILE STARTUP TEST		D2-14560-5	D	ALL FLIGHTS
6.11.4		ACO-523 REMOVAL		D2-14560-5	E	ALL FLIGHTS
6.12		RETRANSMISSION TESTS				
6.12.1		LF-LCF RETRANSMISSION TEST		D2-15080-5	B	ALL FLIGHTS
6.12.2		LF-LF RETRANSMISSION TEST		D2-15080-5	C	ALL FLIGHTS

7.0 INTERIM PROCEDURES

ALL INTERIM PROCEDURES, APPLICABLE TO THIS VOLUME, WILL BE DOCUMENTED AS A PART OF PARAGRAPH 7.0. THESE INTERIM PROCEDURES WILL BE IDENTIFIED AND COLLATED NUMERICALLY BY THEIR IP NUMBERS.